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THE *AGRICULTURAL SITUATION*

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A Brief Summary of Economic Conditions

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IN THIS ISSUE

	Page
Commodity Reviews.....	2-8
Economic Democracy in Soil Conservation..... <i>M. L. Wilson</i>	9
Why the United States Imports Cotton..... <i>Maurice R. Cooper</i>	10
Farm Security—VI. Stability of Land Values..... <i>A. G. Black</i>	13
German Markets for U. S. Farm Products Fast Disappearing <i>D. F. Christy</i>	15
Buying Power of Farm Income Near Pre-depression Years <i>C. M. Purves</i>	17
Meat Prices and Incomes of Consumers..... <i>Preston Richards</i>	19
Population Adjustments in the Great Plains..... <i>Conrad Taeuber</i>	21
What Proportion of Farm Output Goes Abroad?.. <i>Elna Anderson</i>	23

CASH FARM INCOME this year will be around \$9,000,000,000—the largest since '29. This income will have a buying power about equal to that of pre-depression years when income averaged over \$10,000,000,000. What's more, this year's farm income will be spread more evenly throughout the country than in any recent year, though as usual some areas will suffer severe losses. * * * The August 1 crop report indicated large yields for most crops. Corn, over 2½ billion bushels; wheat, nearly 900 million bushels; cotton, 15.6 million bales; hay, 75 million tons; tobacco, 1.4 million pounds. * * * Prices are good, except for cotton, where the large crop is resulting in quotations below last year. Cattle and hogs have both reached the highest levels since the 1920's. Wheat, despite the large crop, is selling for over a dollar a bushel. * * * The business situation and outlook indicates continued strong consumer demand.

Commodity Reviews

DEMAND: Above Last Year

MEASURES of consumer demand for farm products continued to show improvement over last year during July. The income of the non-farm population averaged 11 percent higher per capita than in July 1936. Factory employees alone enjoyed 13 percent more income per person than they did a year earlier. Taking into consideration the cost of living, non-farm families enjoyed incomes 8 percent greater than in July last year. The value of nonagricultural income in terms of the cost of a fixed bill of goods commonly bought by nonfarm families is only slightly below the value in 1929.

Looking ahead for the next few months, business prospects indicate that incomes of city consumers are likely to average between 5 and 10 percent greater than during the corresponding period of 1936 and about the same as at present. In terms of demand for farm products, this means a continued favorable situation during the next few months.

A consideration of several key industries reveals little prospect for additional improvement in industrial production during the remainder of this year, at least. The marked upswing of industrial activity in 1936 and early 1937, was largely a result of increases in the output of steel and textiles—and to a much lesser extent automobiles and minerals. Increased steel production, however, reflected larger production of many different types of finished products. In view of the recent high operating rate in steel and textiles, any further large increases in industrial output this year would have to come largely from other sources which are not now evident.

An increasing number of indications of improvement in foreign demand for farm products have been in evidence in recent months. Activity has increased in the industrial nations and purchasing power has been raised in

countries producing raw materials. United States exports of farm products have not, however, fully reflected the improvement in world demand. With larger agricultural production this year, an increase in agricultural exports is in prospect. In the case of some crops, such as cotton and tobacco, increased foreign production will limit exports from the United States and prevent taking full advantage of the improved demand situation. Other crops, such as wheat and pears, have the double advantage this season of large United States production and small foreign production.

FARM INCOME: July Increase

Income from marketings of farm products increased more than usual from June to July. Taking seasonal changes into account, farm income in July was the highest for any month since May 1930. The increase in July was mainly caused by unusually large sales of grains, particularly wheat. Income from livestock and livestock products decreased more than usual because of the unusually light marketings of hogs and cattle. Income from farm marketings in July was 30 million dollars greater than in July last year, while Government payments were 12 million dollars smaller. Thus, total farm income was 18 million dollars greater in July 1937 than in July 1936. For the first 7 months of the year total cash income including Government payments totaled \$4,585,000,000 as compared with \$4,028,000,000 a year ago. The following table gives the figures for June and July 1936 and 1937.

	From marketings	From Government payments	Total
July 1937....	\$740,000,000	\$12,000,000	\$752,000,000
July 1936....	710,000,000	24,000,000	734,000,000
June 1937....	604,000,000	27,000,000	631,000,000
June 1936....	587,000,000	57,000,000	644,000,000

SEP 24 1937

FARM PRICES: Decline

The prices received by farmers in their local markets dropped slightly from July 15 to August 15, mainly as a result of improved prospects for crop productions. Prices of grains, cotton and cottonseed, and fruit declined sharply, more than offsetting advances in prices of livestock, livestock prod-

ucts, and other items. The index of farm prices computed by the Bureau of Agricultural Economics dropped 2 points. On August 15 the buying power of farm products was estimated at 93 percent of pre-war as compared with 98 percent a year earlier. The prices received by farmers were slightly lower than a year earlier while prices paid were higher.

Index Numbers of Prices Received and Paid by Farmers
[1910-14=100]

Year and month	Prices received	Prices paid	Buying power of farm products ¹
1936			
August	124	126	98
September	124	127	98
October	121	127	95
November	120	127	94
December	126	128	98
1937			
January	131	130	101
February	127	132	96
March	128	132	97
April	130	134	97
May	128	134	96
June	124	133	93
July	125	² 133	² 94
August	123	² 132	² 93

¹ Ratio of prices received to prices paid.

² Preliminary.

Prices of Farm Products

Estimates of average prices received by producers at local farm markets based on reports to the Bureau of Agricultural Economics. Average of reports covering the United States weighted according to relative importance of district and States.

Product	5-year average, August 1909-July 1914	August average, 1909-13	August 1936	July 1937	August 1937	Parity price, August 1937
Cotton, lb—cents	12.4	12.3	12.2	12.4	10.7	16.9
Corn, bu—do	64.2	70.9	103.7	118.1	102.6	87.3
Wheat, bu—do	88.4	89.5	105.1	112.2	99.4	120.2
Hay, ton—dollars	11.87	11.35	10.77	9.48	8.97	16.14
Potatoes, bu—cents	69.7	84.0	127.3	80.4	69.8	93.3
Oats, bu—do	39.9	40.9	43.0	42.5	28.5	54.3
Soybeans, bu—do	(1)	(1)	118.9	132.4	102.1	—
Peanuts, lb—do	4.8	4.8	3.8	4.0	3.7	6.5
Beef cattle, cwt—dollars	5.21	5.08	5.71	7.46	7.64	7.09
Hogs, cwt—do	7.22	7.30	9.89	10.70	11.46	9.82
Chickens, lb—cents	11.4	11.7	15.1	15.3	16.8	15.5
Eggs, doz—do	21.5	18.1	22.4	19.4	20.4	² 25.1
Butterfat, lb—do	26.3	24.1	35.7	31.1	31.6	² 33.1
Wool, lb—do	17.6	17.5	27.2	31.3	31.4	23.9
Veal calves, cwt—dollars	6.75	6.59	7.05	8.25	8.69	9.18
Lambs, cwt—do	5.87	5.51	7.59	8.50	8.64	7.98
Horses, each—do	136.60	137.30	90.80	95.20	93.60	185.80

¹ Prices not available.

² Adjusted for seasonality.

WHEAT: Price Rise Expected

United States wheat growers may expect higher prices some time within the next few months. Liverpool prices are expected to strengthen and pull up domestic prices. This outlook might be altered by a big change in the present prospects for world production, by a failure of European buying to pick up as much as is now expected, or by large exports from Soviet Russia—the question mark in the wheat situation.

Prospects for world production of wheat this year were not greatly changed during the last month. Estimates have been revised upward, as have world carry-over figures. But the general supply picture is about the same as it was 30 days ago. The United States crop is practically "made" now and will total around 890 million bushels according to August 1 indications. The large crop will provide a considerable quantity for export at relatively high world prices in addition to supplying domestic requirements.

Wheat prices in both the United States and foreign markets declined from mid-July to mid-August. Marketings of new-crop wheat have been heavy in this country. Danubian shipments have been heavy, and millers' demand for wheat has dropped off. Temporarily, prices may continue to decline until European buying becomes more active.

COTTON: Dropping Prices

Cotton prices have continued to move downward during the last month. For the week ending August 7 the average spot price at the 10 markets was 11.09, for the next week 10.55, and for the third week of the month, 10.07. Several factors have been responsible for the decline in cotton prices, the chief being an expected larger crop this year. Other factors: Declining mill activity in recent weeks, large cotton crops ex-

pected in several important foreign countries.

Indicated production of cotton on the basis of August 1 condition was 15.6 million bales, compared with 12.4 million bales last year and an average production for 1923 to 1932 of 14.4 million bales. More acres are in cultivation this year than in 1936, and the expected yield of 223.3 pounds per acre, if realized, will be the largest on record.

United States cotton mills consumed 7.8 million bales of American cotton during the 12 months ending July 31. The year before they consumed 6.2 million bales. Consumption of American cotton in foreign countries amounted to perhaps 5.4 million bales, the smallest foreign consumption of American cotton since the 1920-21 season. Exports of United States cotton in the 12 months ending July 31 were about the same as foreign consumption, 5.4 million bales, 9 percent less than a year earlier.

Stocks of old American cotton in the world on August 1 totaled 6 million bales, compared with 7 million a year earlier. Thus the total supply of American cotton for the current marketing season, assuming a crop of 15.6 million bales, will be 21.6 million bales. Last year the total supply was 19.4 million bales.

TOBACCO: Favorable Outlook

Growing conditions August 1 continued to indicate a total production of all types of tobacco one-fourth larger than a year ago. For most types and classes reduced carryover stocks and increasing demand are expected to offset, to a large extent, the price-depressing effect of increased production.

The market situation for flue-cured tobacco is not expected to differ greatly this season from last season when prices averaged 22 cents per pound. Opening of the 1937 marketing season in Georgia and Florida was at prices closely in line with last season. Grow-

ers will probably receive lower prices for **Burley** and **dark air-cured tobacco** than they received last season, although returns are expected to be fairly satisfactory. Production of these types was very small last year. Higher prices for this year's crop of **Maryland tobacco** are indicated by the expected lower production. Although production of **cigar types** is expected to increase, consumption is expected to exceed production. Consequently prices of cigar tobacco are not expected to be lower than in 1936. With increased production and apparently declining consumption, the outlook for **fire-cured tobacco** is not encouraging.

FRUITS: Lower Prices

Apples.—Lower average prices for a much larger crop than last year are in prospect for apple growers this year, though demand conditions are more favorable than a year earlier. The total crop was estimated at 202 million bushels on the basis of August 1 conditions. This is more than one-fourth larger than the 1931-35 average crop. The Eastern and Central States all report much larger crops than last year, while the Western States report a crop of about average size. Weekly carlot shipments of apples are running ahead of last year, and total shipments for the 1937 season through the middle of August were about one-fourth larger than for the corresponding period of 1936. Prices of both western and eastern apples are running below last year's prices.

Peaches.—The peach situation varies considerably in different areas this year. The southern crop was small and prices to growers were favorable. The California crop of clingstones and freestones is expected to be about average, and because of stronger consumer demand, prices will probably average above those of 1936. In the remaining States, all of which harvest principally during August and September, the 1937 crop is expected to be twice as large as the 1936 crop and about 40 percent greater than the

1931-35 average. Shipments of peaches have been light so far, reflecting the small southern crop, but from now on are expected to be heavier than a year ago. Peach prices the rest of the season, therefore, will probably average lower than those of 1936.

Pears.—Prices of California Bartlett pears in New York and Chicago have averaged higher for the early part of the season than in the same period of 1936. The explanation lies largely in the lateness of the harvest and consequent light early shipments, because total production for the 1937 season is expected to be the largest on record. Prices fell sharply during the second week of August as larger supplies moved to market and reached a lower level than for the corresponding week a year ago. Prices are expected to continue below those of last season, even though demand conditions are better this year.

Grapes.—The largest grape crop since 1928 is expected on the basis of August 1 conditions. The average price of all California grapes combined will probably be below that of the 1936 season, because of the large crop. The demand outlook is much improved over that of a year ago and may offset to a considerable extent the price-depressing effect of larger production. The large central and eastern grape crops are also expected to result in lower prices than were received last season by growers in those sections.

TRUCK CROPS: Heavy Yields

An unusually large production of many of the late summer and fall vegetables has resulted in prices somewhat below those of last year. There are a few exceptions. Snap beans, cauliflower, celery, eggplant, onions, peppers, and watermelons in the East and cantaloups and spinach in the West, all are slightly higher than a year ago. As compared with 1936, production of late snap beans is up 72 percent, late domestic cabbage 42 percent, late cantaloups 6 percent, late

cucumbers 24 percent, late tomatoes 23 percent, and late watermelons 20 percent. Late onions, however, are down 12 percent compared with 1936. All these figures are based on August 1 conditions.

For most late vegetables, the larger supplies will mean lower prices during the balance of the marketing season than were received last marketing season. There may be some advances from present levels in some cases, however, as soon as local and home-grown supplies are exhausted. In the case of cantaloups, prices have advanced considerably from the low point in late July and the trend probably will continue upward as the season approaches its end. Onion growers face better market conditions this fall and winter than they had last year, when the late crop reached record proportions.

Because of larger plantings and favorable growing conditions, record crops of most canning vegetables are being harvested this season. The prospect is for large packs and plentiful supplies of most of the canned vegetables for the coming fall, winter, and spring months.

POTATOES: Low Point

Market prices of potatoes have declined almost steadily since early March, with the exception of a sharp rise in late April and early May. The seasonal low point for potato prices usually is in August, and apparently prices have about reached the bottom, particularly in the Eastern centers. Eastern prices may be expected to advance slightly as soon as local and home-grown supplies are exhausted. Eastern prices are below the usual relationship to Western prices. In years of large late crops, similar to 1937, potato prices usually are fairly steady from October through the end of the marketing season. The potato crop will be much larger than last year. The indicated total production on the basis of August 1 condition is 403 million bushels, compared with an average crop of 372 million bushels

for 1928-32. During the last month shipments of potatoes have been mostly by truck from nearby producing areas. But from now on earlot shipments of the late crop will be increasing.

SWEETPOTATOES: Above-Average Crop

Production of sweetpotatoes for 1937 is expected to be 74 million bushels, about 15 percent more than last year's crop, and about 12 percent above the 1928-32 average, on the basis of August 1 condition. Higher yields per acre are expected in most of the major producing areas. Prices of sweetpotatoes have declined sharply since mid-July. The trend is usually downward from July to October. After October, prices usually rise to the end of the season in the late spring months. Prices are now somewhat below those of the year earlier.

FEED GRAINS: Lower Prices

Prices of all feed grains have declined during the last few weeks. Prices of oats and barley are now practically adjusted to a new-crop basis. But corn prices are likely to continue high until farmers begin harvesting their new crop. Then prices will probably drop sharply.

Only minor changes occurred in the feed-grain situation in the last month. The indicated production of all feed grains was boosted to 101 million tons on the basis of August 1 condition. This is slightly larger than the 1928 to 1932 average and the largest production since 1932. The carryover of corn, oats, and barley from previous crops will probably not total much over 3 million tons, compared with an average carryover of about 7½ million tons for the period 1928 to 1932.

CATTLE: Highest Since '28

How the feed situation affects the cattle situation is being demonstrated clearly in the late summer of 1937. The top price of cattle at Chicago

Index Numbers of Prices Paid by Farmers for Feed

[1910-14=100]

	1936	1937
January.....	94	142
February.....	94	145
March.....	94	144
April.....	93	153
May.....	95	153
June.....	94	147
July.....	114	141
August.....	134	127
September.....	136	-----
October.....	132	-----
November.....	133	-----
December.....	137	-----

reached \$18.25 per 100 pounds in late August. This was the highest price paid at that market since October 1928. The number of cattle on feed in the Corn Belt States on August 1 was about 30 percent smaller than a year earlier and the smallest for that date for many years. Marketings of well-finished grain-fed cattle, therefore, will remain smaller than usual during the remainder of the year. Prices of the better grades of slaughter cattle probably will continue near present levels through the early fall, at least.

But even as short feed supplies mean short supplies of fed cattle, ample feed grain production means large supplies of fed cattle. And prospects for a big corn crop this year are already changing the cattle situation. Corn Belt farmers, with hog numbers unusually low, are expected to exert a strong demand for stocker and feeder cattle to use the large 1937 corn crop. This disposition to increase cattle feeding this year will probably: (1) lessen the usual seasonal decline in prices of the lower grades this fall by increasing the demand for feeder cattle, and (2) increase the supply of the better grades of grain-fed cattle in 1938. A decline in prices of the better grades of slaughter cattle is likely in the late winter and spring as the result of these larger supplies. For the lower grades, the price prospect for early 1938 is relatively favorable. Supplies are expected to be smaller than in 1937, while demand will be somewhat stronger.

HOGS: Production Increase

Virtual assurance of a corn crop the largest since 1932 points toward the beginning of an increase in hog production during the next year. First evidence of the increase is a tendency for farmers to hold back spring pigs for finishing on new corn and fattening to heavier-than-average weights. This delay in marketing will hold many hogs off the fall and early winter market. The seasonal increase in supplies from October through December may be less than usual. But the effect of these smaller supplies on prices may be about offset by an expected decrease in storage demand for hog products as compared with a year ago. Thus prices of hogs may decline about as usual this fall and early winter.

The second stage of the increase in hog production brought about by the large corn crop will be an increase in the production of spring pigs next year. The immediate effect of farmers' plans to increase pig production next spring is a holding back of breeding stock which would ordinarily be marketed now. This is one reason why hog prices have advanced nearly \$3 per 100 pounds since early May, the main reason being, of course, the unusually small pig crops in 1936. Top price of hogs at Chicago reached \$13.75 in early August, and this was the highest price paid at that market since October 1926. Prices declined after early August.

With hog production on the up-trend, marketings during the next year will be reduced in order to provide plenty of breeding stock. In order to market as much cheap corn as possible, in the form of high-priced pork, farmers will feed hogs to unusually heavy weights. Thus the decrease in numbers of hogs marketed will be partly offset by larger average weights.

From the supply side, the price outlook for hogs is very favorable for 1938. Total pounds of hogs marketed during the marketing year which begins October 1 will probably be somewhat smaller than in the preceding

marketing year. From the demand side, everything points toward a situation in early 1938 somewhat more favorable than in early 1937.

SHEEP: Steady Prices

Prices of lambs are expected to hold present levels during the remainder of the grass-lamb marketing season up to December 1. Prices of good and choice lambs at Chicago are now (late August) around \$10.50 to \$11 per 100 pounds. Lamb prices ordinarily do not change greatly from August through November, even though slaughter supplies increase seasonally in September and October.

A price-supporting factor during the next 3 months will be a strong demand for feeder lambs in the Corn Belt, generated by the large corn crop. It is expected, because of this strong demand, that prices of feeder lambs will be high in relation to prices of slaughter lambs, with little spread between the two.

In the Western States, the number of lambs fed this winter may not be greatly different from that of a year earlier. Lamb feeding was fairly heavy in the Western States last year. Because of increased feeding in the Corn Belt, marketings of fed lambs next winter are likely to be larger than in the 1936-37 season. Marketings of sheep and other lambs, however, may be smaller. Total slaughter of sheep and lambs during the fed-lamb marketing season, from December to April, will be little if any larger than in the previous season. Since prospects for consumer demand indicate a higher level than last year, prices of fed lambs next winter may average about as high as a year earlier.

DAIRY PRODUCTS: Heavy Milk Flow

Milk production continues to reflect good pasture conditions in most parts of the country. Production on August 1 was much larger than a year earlier and about as high as ever reported for that date. Production will probably

continue heavy during the next few months. The relationship between prices of feed and of dairy products is becoming more favorable for dairy producers. Still lower feed prices are in prospect when the corn harvest begins. A prospective favorable relationship between feed costs and dairy products prices will encourage feeding of dairy cows during the coming winter. About the usual seasonal rise in prices of dairy products is in prospect for this fall. Butter prices are expected to average higher than in the fall of 1936, largely because of stronger consumer demand.

POULTRY: Lower Feed Costs

In spite of an unfavorable feed-egg price relationship, production of eggs has continued at a record level all summer. On August 1, for the fourth consecutive month, egg production per hen was the highest on record. A large proportion of young layers in farm flocks, close culling of less productive hens in the last few months, and favorable feed conditions for farm flocks allowed to range the fields are all factors causing the high rate of production this summer.

Larger storage stocks of eggs will be a price-depressing influence for the next few months, but higher consumer incomes than a year ago are expected to about offset that effect on egg prices. Farm prices of eggs are expected to fluctuate near 1936 prices during the fall. The reduction in the number of young chickens this year points to a reduction in the size of the 1938 laying flock and hence to smaller egg production. Egg prices in the first half of 1938, therefore, are expected to average above those of the first half of 1937.

Farm prices of chickens have apparently not been depressed by the relatively large storage stocks of poultry. The prospect for chicken prices is for a less-than-average seasonal decline from now to December. An advance is possible. Prices are expected to average better than those of 1936 during the fall.

Economic Democracy in Soil Conservation

"We must invent, build, and put to work new social machinery."—
Henry A. Wallace in New Frontiers

THE United States is experiencing one of the most important economic and social developments of its 161 years. The people are becoming conscious of the need for conservation of our natural resources—particularly our farm land resources. And even more important are the democratic methods by which recognition of the need is being translated into action; more important because they indicate that farmers are taking the job of soil conservation into their own hands, which means the job will be done.

During the last year farmers have been gradually building the machinery for the most effective conservation program ever developed in any country. Nearly half the States have adopted soil conservation district laws which permit the setting up of soil conservation districts within the States with power to prescribe local land use regulations for the prevention and control of erosion. Actually, 24 State legislatures have passed such laws.

These new laws, which for the most part follow closely the standard State soil conservation district law prepared in the United States Department of Agriculture, are noteworthy in a number of respects. First of all is their emphasis on the democratic process. Then, they encourage the setting up of districts without regard to county lines. The districts are to be established on the basis of natural boundaries. As we look back through history at the way our county lines evolved, we realize that this is truly a forward step.

These laws recognize, for the most part, that the problem of erosion cannot be solved entirely by individual farmers or individual areas. They provide a mechanism by which farmers can organize themselves for cooperative action to apply on their lands ero-

sion-control practices learned through research and demonstration projects. In all but five or six of the States which have adopted legislation, the statutes appear adequate for comprehensive erosion-control programs.

It is important to note that the soil conservation districts laws passed in the States so far are permissive legislation. That is, complete power is reserved to the farmers to determine whether a district shall be organized, to elect a majority of the governing board, and to determine whether land use regulations shall be adopted, and what such regulations shall provide.

UNDER the standard law, any 25 land occupiers may petition the State committee (provided for in the law) to establish a district. The law defines "land occupier" to include any person or corporation who holds title to or is in possession of land as owner, lessee, tenant, or otherwise. Thus this new social principle is proposed: That the people who live on and work the land should have a voice in how it is used, whether owners or tenants. The State committee then is required to hold a public hearing on the petition, to define the boundaries of the proposed district, and to submit the question whether the district should be created to all land occupiers living within the boundaries. Under the standard law, no district may be established unless a majority of the votes cast in the referendum are in favor of it. In some of the States, a larger vote has been required.

Under the standard law, each district has power to do research in erosion control, to conduct demonstrational projects, to carry out preventive and control measures, to enter into contracts with farmers and give them financial and other assist-

ance, to buy land for retirement or demonstration project purposes, to make loans and gifts of equipment, machinery, seed, and so forth to farmers, to take over and operate State-Federal erosion control projects, and to recommend land use plans for soil conservation. These powers can be carried out on private lands only with the consent of the owner.

In addition to these powers the district may prescribe land use regulations for soil conservation. Such regulations cannot go into effect until after they have been submitted to a referendum of land occupiers and have been approved by a majority. Here again provisions in the different State laws vary. Some States require a larger-than-majority vote for approval. Failure by land occupiers to observe the regulations is punishable by fine as a misdemeanor. The district may file a petition with the local courts asking the court to order the land occupiers to observe the regulations. The court order may provide that if the land occupier fails to perform, the district may do the necessary work and collect the cost from the land occupier.

What these new laws amount to is that they provide the districts with the authority of the State to enforce land use regulations upon a non-cooperating minority. The Federal Government can then spend money in the districts with the assurance that a real job of conservation will be done. Under this new conservation movement is the assumption that society has an interest in avoiding abuse of privately-owned lands. This interest places an obligation on society to assist the land owner to make the best use of his lands. And it throws on the land owner the obligation of so using his lands that they will be fruitful for future generations.

It will be some time before conservation districts are an important factor in soil conservation. But in time it is not unlikely that they may prove the backbone of conservation work in the United States. Such districts can be efficient social machinery for land use regulation and at the same time carry out to the full the principles of economic democracy in agriculture.

M. L. WILSON.

Why the United States Imports Cotton

THE United States imported 253,000 bales of cotton in the 12 months ended July 31, 1937. This was the largest quantity imported in 7 years but it was about one-third smaller than in the years immediately before the depression. Since this country usually produces more than twice as much cotton as it consumes and in recent years has been restricting production, it is not surprising that there should be a great deal of confusion in the minds of many people as to why raw cotton is imported into the United States.

Most of the cotton imported into the United States either differs in

quality from American cotton or is needed to supplement certain qualities not produced in sufficient volume to meet domestic needs. Under normal marketing conditions the United States will never import cotton similar in quality to that produced in this country in large enough quantities to satisfy the demands of American manufacturers (except possibly from Mexico because of its nearness). Imports of 250,000 bales are very small in relation to a total domestic consumption of 7 or 8 million bales.

The price of a particular quality of a given commodity in any two important markets cannot, except possibly

for short periods, differ by much more than the cost of delivering the commodity from one market to another. The existence of such a condition would make it profitable to transfer the commodity from one market to the other. As a result of this transfer, the supply in the lower-priced market would decrease and the supply in the other market increase. Consequently, the price would be strengthened in one market and depressed in the other. As long as American cotton is exported to foreign countries the price in those countries for a given quality must be higher than in domestic markets by at least the amount of the freight, insurance, interest, and other transfer costs. If at any time the spread between the domestic and foreign price were to differ by less than the transfer costs, there would be no incentive for exporting American cotton. Because of this, exporters of foreign cotton will never, except under very unusual circumstances, find it to their advantage to ship to the United States cotton of the same quality as that being exported from the United States in significant amounts. As long as the price of a given quality of cotton in Liverpool, Havre, or Kobe is higher than the price of this quality of cotton in the United States by an amount equal to or in excess of the cost of delivering cotton from the United States to these markets, exporters of similar cotton from Russia, Brazil, and most other countries would lose money by shipping such cotton to the United States.

MORE than one-fourth of the cotton imported in recent years was 1 $\frac{1}{2}$ inches and longer in staple. This is longer than any of the cotton produced in the United States with the exception of a few thousand bales of American-Egyptian (Pima) produced in Arizona. Although staple length is generally considered one of the most important factors determining spinning utility of cotton, other factors are also important. It is said that

this extra-long staple foreign cotton possesses some other elements of quality not possessed by American-grown cotton having approximately the same staple length. This and the fact that insufficient quantities of this extra-long staple cotton are produced in the United States to meet domestic requirements account for the fact that this cotton is imported in significant quantities despite an import duty of 7 cents per pound. Most of the imported extra-long staple cotton comes from Egypt and is consumed by the thread, tire fabric, and fine goods industries. It is said to be needed in order to give additional strength to the yarns, particularly those produced for thread and for tire fabrics.

Imports of Egyptian cotton shorter than 1 $\frac{1}{2}$ inches in staple (a very large part of which is 1 $\frac{1}{8}$ to 1 $\frac{1}{2}$ inches) also account for a substantial portion of the total domestic imports of cotton. This cotton has about the same length of staple as the longer lengths of American Upland cotton, most of which is produced in the Mississippi Delta. While total domestic production of cotton 1 $\frac{1}{2}$ to 1 $\frac{1}{2}$ inches represents only about 5 percent of the total American crop, it is considerably larger than the quantity of such cotton consumed by American mills. The fact that cotton with these staple lengths is imported from Egypt and also from Peru, despite the 7-cent import duty—at the same time substantial quantities are exported—can only be accounted for by differences in quality factors other than staple length. At least domestic manufacturers or consumers of the products for which the import cotton is used apparently believe that the imported cotton is more desirable for their purposes than the domestically produced cotton. Most of this imported ordinary long staple is also used by the thread, tire fabric, and fine goods industries. However, a large part of that imported from Peru is noted for its rough character, which makes it desirable to American manu-

facturers for use in asbestos and part-woolen goods.

Most of the remainder of the cotton imported into the United States during recent years came from India and China. Reports on the staple length of this cotton on hand at the end of the season show all cotton shorter than $\frac{5}{8}$ inch combined. However, a report released in 1932 on the quality of foreign cotton consumed in the United States¹ indicated that most of the cotton being imported from these countries was shorter than $1\frac{1}{8}$ inch and ranged from $\frac{1}{2}$ to $\frac{3}{4}$ of an inch in staple. Although the United States produces comparatively large quantities of cotton shorter than $\frac{5}{8}$ inch, a further break-down would probably show that little American cotton is shorter than $1\frac{1}{8}$ inch. The fact that most of this imported extra-short staple is of a very rough or harsh character, however, is possibly of more importance in accounting for its importation than its shortness of fiber. This cotton is said to be used largely in the manufacture of cotton and part-woolen blankets and other part-woolen goods, because its harsh short fiber gives a desirable feel and appearance to the finished fabric.

¹ Staple Length of Foreign-Grown Cottons Consumed in the United States, 1929-31, Bureau of Agricultural Economics, 1932, mimeographed.

The annual consumption of rice in Hawaii is about 230 pounds per capita, compared to about $5\frac{1}{2}$ pounds in the United States. The annual Hawaiian production of rice is about 4 percent of annual consumption, enough to supply the needs of the Territory for only about 15 days. The bulk of the shipped-in rice comes from California.

A survey by the Bureau of Labor Statistics shows that most wage earners' families spend about 30 to 35 percent of their incomes for food, 10 percent for clothing, and 13 to 20 percent for housing. Automobiles and other transportation take from 5 to 10 percent—this item taking the biggest income slice in the large auto manufacturing centers.

Tuberculosis among cattle has been practically eliminated from 44 States which have been officially designated by the United States Department of Agriculture as modified accredited areas. Such designation signifies that bovine tuberculosis has been reduced to less than one-half of 1 percent as shown by the tuberculin test. Nonaccredited States are California, South Dakota, New York, and New Jersey.

THREE are a few thousand bales of Mexican cotton imported annually, a substantial part of which is believed to be about the same in quality as American cotton. Most of this cotton loses its identity and is apparently sold to domestic manufacturers or is reexported as American.

Information is not available with respect to the quality of the few thousand bales of cotton imported during recent months from Brazil and Russia, but it is safe to say that this cotton differs in quality from the bulk of the American crop or that domestic importers encountered a temporary and very unusual market situation which made it possible to import this cotton at a lower price than domestically produced cotton of similar quality could be obtained.

It appears, therefore, that a substantial part of the cotton imported into the United States is accounted for by differences in the quality of this cotton and that produced in the United States. Even in the case of extra long staple cotton, which is not produced in sufficient quantities to meet the requirements of domestic mills, there appear to be significant differences in other quality characteristics between that produced in the United States and that imported.

MAURICE R. COOPER.

Farm Security

VI. Stability of Land Values¹

THE wide fluctuation in farm land values within the last 25 years has created great hardship and suffering among farm families. Thousands of farm families are still paying for the speculative spree during and just after the World War. We have learned that one of the prime requisites of farm security is stability of farm land values.

But stability of land values is extremely difficult to achieve, for land speculation cannot be wholly controlled by legal force. Farmers themselves have often in the past preferred to over-capitalize the current and anticipated earnings of their farms rather than to raise their standards of living. It is difficult to insist that farmers raise their standards of living rather than bid up the value of land, if they prefer to do the latter.

At present there is no evidence of an impending land boom in this country. In the spring of 1937 land values were only about 85 percent as high as they were before the World War and only 16 percent higher than at the bottom of the depression in 1933. But now is the time to talk about a land boom and the dangers from speculation. Once under way, a land boom, like a snowslide, is hard to stop.

Obviously, some upturn from depression levels is just as desirable as the avoiding of a boom. But it is important that this upturn be orderly and that a reasonable relationship between earnings and values be maintained.

Considering farming as a whole, the rate of return on capital invested has generally been lower than the rate of interest on farm mortgages, at least if the operator's labor is evaluated at approximately the rate paid hired labor. Farmers, as a group, have

apparently for a long time been willing to capitalize into land values more of their current and anticipated incomes than seems warranted, or at least to capitalize on the basis of returns far below the mortgage rate of interest. This may be a result of a prevailing faith that somehow, sometime, values will again repeat the upward trend of 1900-1920. It may represent a willingness to accept a lower rate of return on investment in farming in return for the satisfaction in rural life and other intangibles accruing to farmers.

Over a long period, education may tend to alter this situation and lead farmers to place more importance on standards of living than in the past. If not, then lowered interest rates on farm mortgages (which apparently reduce carrying charges) may eventually be reflected in higher capitalization of farm land, which in turn leads to higher loans and very little if any reduction in carrying charge per acre of farm land. For the immediate present, there is no doubt but that farmers are benefiting from the general reductions in the mortgage rate of interest.

AMONG proposals for curbing land speculation by governmental action are two using the taxation approach. A tax on income from rents would tend to discourage absentee ownership of land and would encourage ownership by owner-operators. On the other hand, such a tax might shift investment from ownership of farm land to loans on mortgages. A shift of investment from farm land to mortgages on farm land might create more owner-operators. But owner-operators with heavy mortgage debts are usually in a worse financial position than tenants. The tenant may often secure adjustments in his rental payments depending on price conditions, while the debtor usually has contracted a fixed

¹ This is the sixth in a series on farm security.

sum of money to be paid annually. Indebted owners have probably suffered more during the last depression than have tenants, at least in the Middle West. Such a tax would also operate unfavorably against retired farmers and farmers owning more land than they operate. Such a tax would be fairly easy to avoid through the operation of farms by professional farm managers and hired labor and would do little to diminish the fundamental difficulties causing land speculation.

A second application of taxation would be in a levy upon the increase in value of property between the time title was acquired and time of sale. Clearly, such a tax, by striking directly at the net gains of speculation, would tend to discourage persons from buying land with a view to resale at a profit. A modification of such a tax would be to make the tax lighter as the period between purchase and sale increases. For example, a 90 percent tax on increment in value for sales made within 1 year of purchase, 60 percent within 2 years, and so on, to a minimum levy after, say, 10 years. The difficulty of so graduating such a tax that speculative activity would be effectively discouraged, without at the same time interfering with normal buying and selling, is obvious.

The influence of lending agencies providing farm mortgage credit should also be considered as a means of reducing speculation in farm land. The land boom that culminated in 1920 was undoubtedly stimulated by the willingness of commercial banks and other lending agencies to finance land

transactions. Under the policy of the Farm Credit Administration, appraisals are limited to normal value. The adherence to such a policy, especially if cooperation could be obtained from other lending agencies, would go far toward holding in check a run-away land boom.

A number of States have provisions in their insurance codes limiting the number of years companies may own real estate acquired through foreclosure. During recent years of many foreclosures, insurance commissioners suspended some of these restrictions on the theory that wholesale selling of land by insurance companies would further demoralize a fast-falling market. Such restrictions might well again be declared in force on the basis of a rising market, thus limiting the opportunities of profiting on foreclosed land.

While all these suggestions for preventing land values from outstripping farm earnings may have merit, it is well to remember the two most important ways of preventing great fluctuations are: (1) The maintenance of relatively stable farm prices and farm incomes, and (2) the changing of farmers' attitudes about land values. Nothing can keep farm land values from fluctuating violently if farm incomes and the prices of farm products fluctuate violently. And nothing will prevent speculative orgies such as that of 1919-20 unless farmers are willing to put their increased incomes into higher standards of living rather than higher land values.

A. G. BLACK.

The National Resources Committee reports that in 1787, the year the Constitution was framed, the surplus food produced by 19 farmers went to feed one city person. In recent average years 19 people on farms have produced enough food for 56 nonfarm people, plus 10 living abroad.

About 15 percent of United States farms have electricity; 20 percent kitchen sinks and drains; 17 percent cold water piped into the house; 6 percent piped hot water; 9 percent flush toilets; 8 percent furnace heat; and 4 percent gas or electricity for cooking.

German Markets for U. S. Farm Products Fast Disappearing

GERMANY'S foreign trade policy in recent years has resulted in a tremendous reduction in the volume of that country's international trade. The policy has been particularly harmful to the United States. Whereas the value of German imports from all countries was reduced by one-half from 1929 to 1936, imports from the United States were reduced by nearly four-fifths. The principal conditions responsible for this reduction have been a lack of foreign exchange which led in recent years to an attempt by Germany to balance its international trade with individual countries and a drive toward self-sufficiency in the production of raw materials. Germany's lack of foreign exchange is mainly an outgrowth of (1) the World War which caused Germany to shift from a creditor to a debtor nation and (2) its inability to regain its former large export trade.

Leaving out of consideration the effect on its total foreign trade, the success of Germany in balancing trade with individual countries has been remarkable. This policy has been particularly harmful to the United States because, as a natural supplier of many of the raw materials and foodstuffs required by Germany, we have always sold to Germany a great deal more than we have bought from that country. In 1929, for example, Germany imported from the United States goods valued at more than \$425,000,000, while the United States imported less than \$255,000,000 worth of German products. In 1936, however, German imports from the United States were reduced to a little over \$93,000,000 and American imports from Germany to slightly more than \$80,000,000.

The development of our trade with Germany is of particular importance to American agriculture. Until recently, Germany was our second most important customer for agricultural products. As late as 1932, Germany

absorbed fully 15 percent of our agricultural exports. But in 1936 less than 8 percent of our farm exports were destined for Germany; and this percentage is calculated on the basis of a much smaller total value of trade. The decline in the value of our agricultural exports to Germany accounts for fully 20 percent of the decline in our agricultural exports to all countries.

Whereas the value of *all* imports into Germany from the United States declined by 78 percent between 1929 and 1936, the value of our important *agricultural products* including cotton, lard, apples, prunes, tobacco, and wheat declined by 86 percent. And the value of German imports of these products during the first 6 months of 1937 was only about half as large as for the corresponding period of 1936. (See table 1.) Some of the decline in 1936 as compared with 1929 is, of course, due to lower prices.

TABLE 1.—*Value of Germany's imports from the United States*

Period	All imports from United States	Total imports of specified products ¹	
		Value	Percentage of all imports
1929	1,000 dollars	1,000 dollars	Percent
1929	425,651	196,132	46
1930	311,718	137,928	44
1931	187,018	79,759	43
1932	140,549	76,501	54
1933	147,332	85,992	58
1934	146,743	67,254	46
1935	96,891	29,146	30
1936	93,581	28,059	30
January-June 1936	52,715	19,389	37
January-June 1937	46,544	10,599	23

¹ Cotton, lard, apples, prunes, tobacco, wheat.

THE decline in Germany's imports of American agricultural products does not mean that Germany has been wholly successful in its program of self-sufficiency. With the possible exception of American types of tobacco,

however, Germany has found it possible through preferential arrangements of various kinds to obtain increasing quantities of agricultural products from near-by European countries and certain South American countries that have been willing to exchange their agricultural products for German industrial goods.

In table 2 are shown German imports of specified agricultural products from the United States expressed as percentages of total imports of those products from all countries. Only in tobacco have we been able to maintain anything near our former share of the German market. From 1929 to 1933 the United States furnished from 73 to 79 percent of all the cotton imported into Germany, but by 1936 this percentage had fallen to 30. Germany was formerly our second most important customer for lard. About 88 percent of all German lard imports in 1929 were of American origin and 76 percent as late as 1933. In 1936, however, American lard constituted only 7 percent of German imports of that product. There were no imports of American lard reported during the first half of 1937. A somewhat similar development exists in the case of apples and prunes, and German imports of American wheat and wheat flour are now almost nonexistent.

WHILE the above percentage figures indicate the degree to which American agricultural products have been supplanted by those of other countries, an even more striking picture of trade developments with Germany in these products can be gained from table 3 which shows the actual quantities of major American agricultural products imported into Germany since 1929. Imports of these products into Germany during the first half of 1937 show a further drastic decline from even the small imports of those products during the first half of 1936. Only in tobacco have we been able to retain an appreciable part of our former trade, and this has been the result of a shift to lower-valued products such as stems and trimmings.

It is recognized, of course, that part of the decline in our exports of agricultural products to Germany has resulted from short supplies in the United States. This is particularly true in the case of lard. In general, however, the reduction in German takings of American agricultural products has been the result of Germany's drive for self-sufficiency (particularly successful in the case of wheat) and more especially to the German policy of obtaining its necessary agricultural products from nearby countries and from countries willing to deal with

TABLE 2.—*German imports of specified United States farm products in percentages of total imports of those products*

Period	Cotton	Lard	Apples	Prunes	Tobacco	Wheat, including flour as grain
	Percent	Percent	Percent	Percent	Percent	Percent
1929	77	88	42	88	10	11
1930	74	79	24	91	10	15
1931	73	69	67	(1)	9	8
1932	79	73	24	83	13	20
1933	75	76	30	71	11	3
1934	60	54	38	51	9	3
1935	24	5	16	41	8	(2)
1936	30	7	8	22	8	3
January-June 1936	39	7	35	20	8	4
January-June 1937	25	(1)	8	7	7	(2)

¹ If any, included in "Other countries."

² Less than 1 percent.

TABLE 3.—*German imports of specified farm products from the United States*

Period	Cotton	Lard	Apples	Prunes	Tobacco	Wheat, including flour as grain
	<i>1,000 bales</i>	<i>1,000 pounds</i>	<i>1,000 boxes</i>	<i>1,000 pounds</i>	<i>1,000 pounds</i>	<i>1,000 bushels</i>
1929	1,411	186,680	3,357	60,616	23,812	9,143
1930	1,271	140,368	2,946	39,126	23,672	6,891
1931	1,092	125,766	3,979	(1)	14,901	2,502
1932	1,365	173,459	3,103	248,644	23,781	7,539
1933	1,444	124,783	3,183	55,793	20,091	754
1934	875	49,116	3,140	28,643	18,610	586
1935	345	3,150	638	13,188	15,690	3
1936	326	4,325	457	9,918	16,781	80
January-June 1936	241	2,952	438	5,297	8,287	372
January-June 1937	118	(1)	160	3,638	6,968	318

¹ If any, included in "Other countries."² Figures for 1932 to date include plums of all kinds.³ Wheat only; if any flour, included in "Other countries."

Germany on an exchange basis. Germany has followed this policy for two reasons: First, to assure itself of the ability to obtain substantial quantities of these products in case of war, and second, because it affords the means of promoting German exports which are otherwise too high in price (because of the overvaluation of the mark) to be sold in competition with similar products from other countries.

A resumption of more normal trade relations with Germany appears to be

essential if the United States is to bring about a material improvement in its foreign trade in agricultural products. This, however, would mean increased importation into the United States of German goods. In view of the high internal value of the mark, Germany has resorted to a mark of a lower value to encourage exports to a number of countries. But it has not yet been possible to follow this practice in trade with the United States.

D. F. CHRISTY.

Buying Power of Farm Income Near Pre-depression Years

ALTHOUGH farmers' incomes from the sale of farm products has nearly doubled during the last 5 years, income in 1937 is still somewhat below pre-depression levels. The prices paid by farmers, however, are also lower than during the years prior to 1930, so that the purchasing power of farm products is not greatly different from the pre-depression period. If Government payments to farmers are added to the income from farm products, the purchasing power of farmers' income in 1937 was slightly higher than in the period 1924-29 and nearly equal to that of 1929—the peak year of farm income during the 14 years for which data are available.

The estimate of cash income from farm marketings for the calendar year 1937 of \$8,575,000,000 is based upon marketings during the first half of the year and on indications as to probable sales and prices of farm products during the last half of the calendar year. Comparable estimates of cash income from farm marketings and cash farm income, including Government payments, for earlier years are given in the accompanying table. This is the fifth successive year that farm income has increased. The increase in income from sales of farm products from 1936 to 1937 is expected to equal about \$1,000,000,000. During the first half of 1937 Government payments

The Relation Between Cash Farm Income and Prices Paid by Farmers

Year	Cash income—		Index numbers of cash income—		Index numbers of prices paid by farmers	Ratio of cash income to prices paid—	
	From farm marketings	From farm marketings and Government payments	From farm marketings	From farm marketings and Government payments		Excluding Government payments	Including Government payments
	Mil. dol.	Mil. dol.	1924-29=100	1924-29=100		1924-29=100	1924-29=100
1924	9,785		96		99	97	
1925	10,324		102		102	100	
1926	9,993		99		100	99	
1927	10,016		99		99	100	
1928	10,289		101		101	100	
1929	10,479		103		99	104	
1930	8,451		83		94	88	
1931	5,899		58		81	72	
1932	4,328		43		69	62	
1933	4,955	5,117	49	50	71	69	70
1934	5,792	6,348	57	63	80	71	79
1935	6,507	7,090	64	70	81	79	86
1936	7,578	7,865	75	78	81	93	96
1937 ¹	8,575	9,000	84	89	86	98	103

¹ Preliminary estimate.

amounted to 330 million dollars compared with 287 million dollars for the entire year 1936. Some of the payments on the 1936 agricultural conservation program are still to be made, and it is anticipated that payments for the 1937 agricultural conservation program will get under way before the end of this calendar year so that total payments to farmers during the year will probably amount to from 400 to 450 million dollars.

The real significance of agricultural income, however, is its value in exchange for commodities and services, or its purchasing power. In determining the purchasing power of farm income, the level of commodities bought by farmers must also be taken into account. In the first half of 1937, prices paid by farmers for commodities purchased for home consumption and for use in production averaged 133 percent of the base period 1910-14 compared with 154 percent during the period 1924-29.

IT WILL be noted from the table that income from farm marketings in 1937 is expected to average about 84 percent of the period 1924-29. The addition of Government payments to the income from farm market-

ings raises the income of farmers for 1937 to 89 percent of the pre-depression period. The level of prices paid by farmers is expected to average about 86 percent of this same period. These various indexes indicate that the purchasing power of income from farm marketings in 1937 will be slightly lower than during the years 1924-29. If Government payments are included, the purchasing power is slightly higher than during the pre-depression period but slightly lower than in 1929 when farm purchasing power was greatest for any of the last 14 years.

In comparing the purchasing power of this year's farm income with the purchasing power of income during the years 1924-29, it is only fair to say that in the 1920's farmers as a group were not relatively prosperous. Farm land values were declining during most of this period, the mortgage debt was burdensome, taxes were high, and prices of farm products were low relative to prices of most other commodities. In comparing 1937 income with pre-depression income, it should also be borne in mind that there are more people on farms now than in the 20's, so that this year's income must be spread over a larger population.

C. M. PURVES.

Meat Prices and Incomes of Consumers

RETAIL prices of meats, especially of beef, have risen in the last 12 months and are now much higher than at the depression low point in 1933. But, so far as can be determined from the available statistics, they are now no higher in relation to consumer incomes than they were before the depression. This does not mean that the consumer is not feeling the pinch of the reduction in meat supplies caused by droughts in 1934 and 1936. Had there been no decrease in production, consumers would have paid out about the same total amount of money for meat, but they would have received larger quantities for their money.

The accompanying table provides comparisons of meat prices, the total quantity and retail value of consumption of federally inspected meats, and non-agricultural income. The prices, on which the index numbers of meat prices are based, are fairly representative of all meats sold in the New York market, but they may not be representative of single cuts of meat, such as porterhouse steak, breakfast bacon, or lamb chops.

Despite the marked advance in prices of meats in the last 3 or 4 years, they are still somewhat below the prices in the years immediately prior to the depression. In the first half of 1937 the average retail price of beef at New York was 20 percent below the average for the years 1924-29. The retail price of pork was 14 percent below average and that of lamb was 34 percent below average. The retail value at New York prices of consumption of federally inspected meats in the first half of 1937 was 24 percent smaller than the 1924-29 average. But the estimated incomes of urban consumers were only 5 percent below the average for the predepression years 1924-29.

In July this year retail prices of meats generally averaged higher than in the first 6 months of the year, as is the case in most years. Prices of beef and pork, however, were about 5 percent below the 1924-29 average and prices of lamb were nearly 30 percent below this average. It appears, therefore, that both retail prices of meats and the total amount expended by consumers for meats are lower in

Index Numbers Relating to Meat Prices and Consumption of Meats

[1924-29=100]

Period	Retail prices of meat, New York City ¹			United States consumption of federally inspected meats including lard	Retail value of consumption of federally inspected meats ²	Nonagricultural income ⁴
	Beef	Lamb	Pork ³			
1928.....	112.5	104.1	97.6	100.5	104.7	104.1
1929.....	111.4	100.2	94.7	100.8	102.7	107.0
1930.....	98.1	80.2	89.2	98.0	90.9	100.4
1931.....	83.3	66.8	72.1	90.4	76.2	85.5
1932.....	71.6	55.2	56.1	98.0	60.8	67.6
1933.....	58.9	50.1	50.4	103.0	55.7	63.0
1934.....	63.8	56.6	62.7	101.5	64.3	71.9
1935.....	83.4	62.9	92.8	84.4	73.2	77.0
1936.....	77.5	66.9	90.8	96.5	80.5	87.0
January-June 1936.....	77.4	67.2	91.5	91.2	76.4	83.0
January-June 1937.....	80.3	65.8	86.3	92.8	76.8	95.4

¹ Composite prices weighted according to proportion of cuts and products in good grade carcasses.

² Major hog products, including lard.

³ Computed from retail prices of Good grade meats at New York City and apparent consumption in the United States of federally inspected meats, including lard.

⁴ Agricultural Adjustment Administration.

relation to the 1924-29 average than are total incomes of consumers.

THE SUPPLY of meats available for consumption in this country in the last 3 years has been considerably below that of other recent years because of the greatly reduced feed supplies for livestock resulting from the droughts of 1934 and 1936. In 1934 corn production in the United States was the smallest in more than 50 years. Production of other feed grains and of hay also was very small, and pasture conditions were much below normal. In 1935 the production of feed grains was much larger than in 1934 but was below average. In 1936 corn production was nearly as small as in 1934. The per capita supply of federally inspected meats and lard available for consumption in 1935 was the smallest in many years and was nearly 20 percent smaller than the average for the preceding 10 years. The per capita consumption of meats in 1936 was larger than in 1935 but below average. In the first half of 1937 per capita consumption of meats was about the same as in the corresponding period of 1936.

Supplies of meats are likely to continue small during the remainder of 1937 at least, and retail prices probably will be maintained near present levels during this period. But it now appears fairly certain that production of corn and other feed grains in 1937 will be about equal to average and will be the largest for any year since 1932. This increase in feed grain production will be reflected in increased slaughter supplies of hogs and the better grades of cattle in 1938. If corn production in 1938 should be about average, hog production will be further stimulated. Barring the recurrence of severe droughts, it is expected that meat production will increase considerably in the next few years. With larger supplies of meats expected after early 1938, retail meat prices probably will decline somewhat, if incomes of consumers do not increase above present levels. In any event, with favorable weather and feed conditions, the supply of meat available for consumption after the first half of 1938 is likely to be larger than in the past 3 years.

PRESTON RICHARDS.

Notes on Progress

The first successful cast-iron plow invented in the United States in 1797 was rejected by New Jersey farmers under the theory that cast iron poisoned the land and stimulated the growth of weeds.

When Jethro Tull thought to introduce mechanical planting of grain by the drilling machine to displace broadcast sowing by hand, he was, by threats of violence, forced to leave many English farm villages.

Amos Bronson Alcott would not allow his land to be manured because he considered it "a base and corrupting mode of forcing Nature."

Threshing machines when first introduced into England in 1830 were destroyed by the workers.

Small-town bankers and business men refused for many years to lend money on tractors on the ground that they were a menace to farmers. They argued not only that farmers could not operate the machines profitably, but also that if they were successful the farmer would have too much leisure time.

Unofficial estimates set the 1937 crop of cranberries on southeastern Massachusetts bogs at better than 500,000 barrels, compared with an average crop of around 400,000 barrels. The average United States crop for 1928 to 1932 was 580,000 barrels.

Population Adjustments in the Great Plains

(No. 2 in a series)

THE severe droughts since 1930 have reemphasized the need for a better adjustment of the agriculture of the Great Plains to the resources of that region. The Great Plains committee, appointed by President Roosevelt, recommended that many farm units be enlarged, so as to permit more extensive farming practices. If this recommendation is to be put into effect, a decrease in the farm population of the area will be necessary.

A decrease in farm population of this area is already under way. The farm population of the Great Plains States was estimated at 5,877,000 at the beginning of 1937. This was a decrease of approximately 235,000 persons or 4 percent since 1935. The number of people on farms in this area in 1937 is slightly less than in 1910, when it was about the same as in 1920, 1930, and 1935.

During 1931 and 1932 the trend of farm population in the Great Plains was upward the same as for the rest of the country. Migration from farms decreased and migration to farms increased. During 1933 a reversal set in. Since then farm population in the Great Plains has decreased, in contrast with the trend for other parts of the country. Nearly all the gains of 1931 and 1932 had been offset by January 1, 1935. Because of continued crop losses, migration from farms to towns and cities and to farms in other States continued apace in 1935 and 1936. The net loss of farm population in the Great Plains since 1930 has amounted to nearly 900,000, an average of more than 125,000 per year. During the 1920-30 decade these States experienced a net migration from farms of about 115,000 per year.

The fact that the farm population of these States has been decreasing does not of itself indicate that the necessary adjustments are taking place. Throughout the history of settlement of the Great Plains the

An earlier article on this subject by Conrad Taeuber, "The Farm Population of the Great Plains," is found in the September 1936 Agricultural Situation. Further information is also found in "Social Problems of the Drought Area," Works Progress Administration Research Bulletins, Series V. See especially No. 2, "The People of the Drought States," by Conrad Taeuber and Carl C. Taylor.

population has been a highly mobile one. Parts of the area have experienced alternations of heavy movement in and heavy movement out. Western Kansas and Nebraska lost much of their farm population between 1890 and 1900 as a result of drought, but during the following decade the westward movement quickly offset these losses. Between 1910 and 1920 large sections of northern and western Texas reported marked emigration, but during the twenties there was heavy immigration. Southwestern Oklahoma, which experienced an outward drift between 1910 and 1920, saw the direction of the flow changed between 1920 and 1930. While these alternations were due to specific local causes, they readily suggest the possibility of a combination of factors which might again be favorable to increased settlement in the area.

FURTHERMORE, it is evident that a part of the migration from farms has been to villages and cities in the area, and it is to be expected that the recurrence of favorable crop conditions would serve as an inducement to return to farms. Part of the much-talked-about movement to other States, even of the movement to the Pacific Coast States, probably is temporary, and some return migration from there is to be expected.

Even if there were no return of those who had left, there would still be persons moving to farms in these States. In the past this movement has occurred even when the trend was distinctly away from farms. Thus, there were 28,000 original homestead entries filed from Montana between 1920 and 1930 although the farm population of the State decreased by 24,000 persons. More recently, during the years 1930 to 1935, when the trend of the movement was primarily away from farms, some people were moving to farms in all parts of the region. Nearly 6 percent (356,000) of the 6 million farm people in the Great Plains States in 1935 did not live on farms in 1930. These migrants to farms are found in all parts of the area, even in those parts where the drought was most severe.

If migration to and from farms in the Great Plains should cease, the farm population would increase rapidly because of the relatively high birth rates there. Since 1930 the excess of births over deaths in the farm population was approximately 95,000 per year. Thus, without migration the farm population of the area would increase between 1 and 2 percent annually.

The nature of the migration from an area is a significant factor affecting the adjustment of population and resources. Emigration may remove those persons who could most easily adapt themselves to the new situation, or it may remove those who could adapt least easily. Migrations typically affect young adults and

leave behind a larger proportion of older persons who often find needed adjustments more difficult. Census returns for some counties of the Great Plains show an increase in number of farms and a decrease in farm population, suggesting in part that young families with children were displaced by families without children. In other parts the farm population decreased while the number of farms remained unchanged. This suggests that the younger persons have moved away, leaving a larger proportion of older persons to carry on the farming activities. In some areas those farm operators with sufficient capital to relocate themselves elsewhere have moved away, leaving behind those who will require more assistance.

Emigration, alone, is relatively inefficient for accomplishing the necessary adjustments, for it provides little assurance of increased opportunity to the individual, it rarely strikes at the roots of the maladjustments, and it frequently impedes the proper functioning of those social institutions which are essential to a satisfactory farm life. The fact that there has been some emigration from farms in the drought area cannot be taken to indicate that necessary adjustments are taking place. Moreover, the emigration from farms which has taken place has not always facilitated the necessary adjustments. And, so long as present attitudes and policies regarding the land prevail, there is no certainty that there may not be a new wave of settlers to take the places of those who have recently left.

CONRAD TAEUBER.

Americans eat an average of 18 pounds of butter a year. Our Canadian neighbors and the Australians consume over 29 pounds. The consumption of butter in Sweden, Finland, and Germany is larger than in the United States.

A new automatic crop news service has recently been established by the New Jersey Department of Agriculture. Farmers in the central New Jersey potato belt who telephone the field office of the Department at Hightstown for crop information are connected with a mechanical announcer. The mechanism gives the latest crop news, including prices, movement, storage holdings, diggings, etc.

What Proportion of Farm Output Goes Abroad?

THE percentage of agricultural production exported from the United States remained at a low level in 1936, amounting to 6 percent, compared with 7 percent in 1935. The average for 1931-35 was 8 percent, compared with 12 percent for the 5-year period just before the depression, 1925-29.

The following table shows the percentage that agricultural exports were of agricultural production for the years given:

Year	Percentage Exported	Year	Percentage Exported
1909	10	1923	14
1910	13	1924	16
1911	14	1925	12
1912	14	1926	13
1913	15	1927	13
1914	10	1928	12
1915	15	1929	10
1916	17	1930	8
1917	13	1931	7
1918	18	1932	8
1919	19	1933	10
1920	14	1934	8
1921	17	1935	7
1922	14	1936	¹ 6

¹ Preliminary estimate.

Compiled from reports of the Bureau of Foreign and Domestic Commerce and the estimates of income from farm production of the Bureau of Agricultural Economics. Crop year is used for crops; calendar year for livestock and livestock products.

Our exports of agricultural products have decreased almost steadily since 1926. (See chart.) Lower purchasing power in foreign countries, the erection of trade barriers by this country and foreign countries, and, in recent years, reduced production of farm products in the United States have been the chief causes of the decline in exports. Production of farm products has declined since 1931 because of drought and the A. A. A. programs, but the decline in exports has been greater.

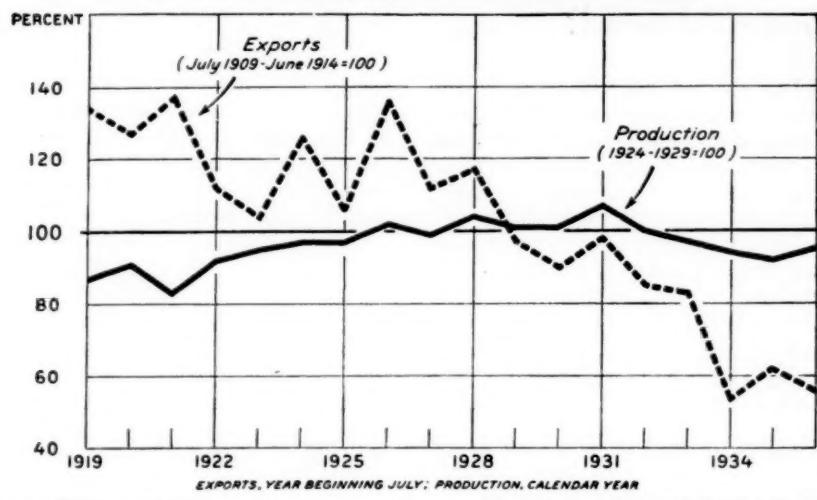
The proportion of the cotton crop exported has been between 50 and 60 percent in recent years. Production

increased 17 percent in 1936 over the previous year, but exports were lower, so that the proportion of the crop exported decreased to 45 percent. The decrease in cotton exports during the last 5 years has been caused by (1) smaller supplies of American cotton and higher prices relative to prices of foreign cotton, (2) an increase in foreign production, (3) reduced buying power in foreign countries, and (4) the low level of general business conditions during most of this period.

Hog production, represented by live weight of hogs slaughtered under Federal inspection, rose 38 percent in 1936 above the slaughter of the previous year, which was the lowest since 1910. Exports increased 5 percent but the ratio of exports to production remained at about the low level of 1935. The sharp decline in exports of hog products since 1931 has been caused by restrictions on imports of hog products in several foreign countries and by the decrease in domestic hog production since early 1934. From 1931 to 1934 we exported about 8 percent of total hog production (12 percent of production under Federal inspection), but in the last 2 years we have averaged only about 3 percent (5-6 percent under Federal inspection). In recent months we have temporarily been a net importer of pork for the first time in history. (See p. 12, July 1937 Agricultural Situation.)

WHEAT production remained low in 1936. Four small crops, largely the result of abnormally low yields, have caused domestic prices to rise above export levels and curtail exports. In addition, drastic measures have been taken during recent years by European importing countries to reduce their purchases of foreign wheat. The United States has been a net importer of wheat instead of a net exporter during the last 3 years. This

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BUREAU OF AGRICULTURAL ECONOMICS

season, however, we will sell abroad considerable wheat from the large 1937 crop.

Tobacco production and exports both declined in 1936-37, and the ratio of exports to production was about the same as in the previous year. We

have continued to export about 37 percent of our tobacco production in recent years. Tobacco is the only important farm export for which the percentage exported has not declined in the last few years.

ELNA ANDERSON.

Measures of Domestic Demand

[1924-29=100]

	July				Percent change		
	1929	1933	1936	1937	1936-37	1933-37	1929-37
National income	107.3	61.9	87.6	98.1	+12	+58	-9
Nonagricultural income:							
Total	108.0	62.0	86.8	97.6	+12	+57	-10
Per capita	102.6	57.4	77.9	86.8	+11	+51	-15
Factory pay rolls:							
Total	109.1	52.3	81.1	102.4	+26	+96	-6
Per employed wage earner	102.0	68.6	87.3	98.8	+13	+44	-3
Industrial production:							
Total	116.1	93.6	101.1	107.3	+6	+15	-8
Factories processing farm products	107.0	114.6	104.2	101.3	-3	-12	-5
Other factory production	121.9	84.4	99.5	110.7	+11	+31	-9
Construction activity:							
Contracts awarded, total	102.5	17.4	48.8	56.2	+15	+223	-45
Contracts awarded, residential	83.3	11.6	39.4	41.2	+5	+255	-51
Employment in production of building materials	94.7	41.6	56.3	63.2	+12	+52	-33
Cost of living:							
Food	102.6	68.4	80.9	82.7	+2	+21	-19
"All other items"	97.5	80.7	81.8	84.5	+3	+5	-13
Purchasing power of nonagricultural income per capita:							
For food	100.0	83.9	96.3	105.0	+9	+25	+5
For "All other items"	105.2	71.1	95.2	102.7	+8	+44	-2

NOTE.—All indexes adjusted for seasonal variation except "Cost of living."